



ME-30 GUITAR MULTIPLE EFFECTS

Owner's Manual

Thank you, and congratulations on your choice of the BOSS ME-30 Guitar Multiple Effects processor.

Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (page 2–3; page 4). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, this manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

Main Features

Includes Phrase Trainer Function

Since an AUX input jack is provided, it's easy to practice along with CDs, tapes or etc. Additionally, the phrase trainer function is convenient for copying or repeated practicing of difficult passages, allowing you to record up to twelve seconds of music from devices connected to the AUX input jack, to play this back repeatedly, and also to slow down tempos.

Battery Operation

The ME-30 is the first effects device in its class able to operate exclusively on battery power (as of July, 1997). Talk about mobility on stage—this is it! Naturally, you can also use an AC adaptor (optional) if you wish.

Large Display Makes the ME-30 Easy to Use

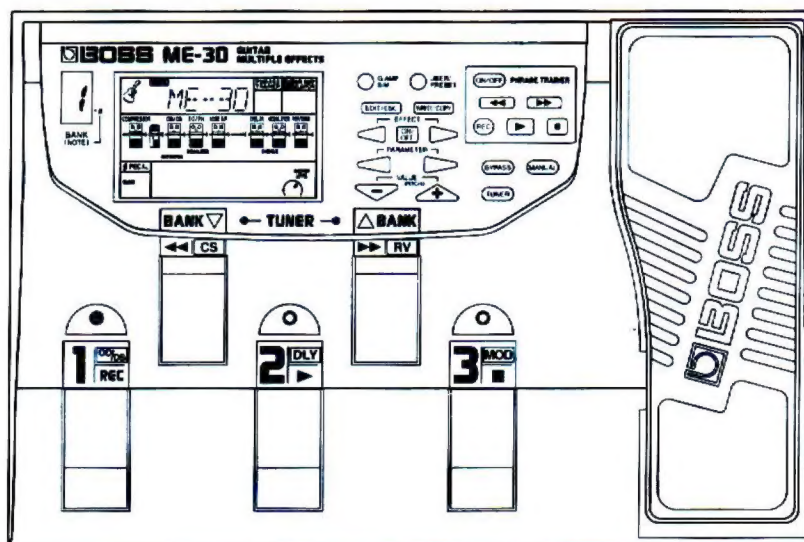
The ME-30's Liquid Crystal Display lets you know at a glance your effects' on/off status, the mode selected, and other information. Furthermore, since you can see the basic values of all parameters for each effect when editing, creating sounds is a breeze.

Features Analog Distortion Circuitry

The ME-30 utilizes analog circuits for distortion effects. Whether you use mild or heavy distortion, you can be sure you're getting that famous BOSS sound.

Equipped with Expression Pedal

The ME-30 includes an expression pedal that can be used to control various functions, such as volume and wah.






USING THE UNIT SAFELY

INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

About ⚠ WARNING and ⚠ CAUTION Notices







⚠ WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
⚠ CAUTION	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

About the Symbols







	The ⚠ symbol alerts the user to important instructions or warnings. The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
	The ⚡ symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
	The ● symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

ALWAYS OBSERVE THE FOLLOWING





⚠ WARNING

- Before using this unit, make sure to read the instructions below, and the Owner's Manual. 
- Do not open (or modify in any way) the unit or its AC adaptor (optional). 
- Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your dealer, or qualified Roland service personnel. 
- Never use or store the ME-30 in locations such as the following: 
 - Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
 - Damp (e.g., baths, washrooms, on wet floors); or are
 - Humid; or are
 - Dusty; or are
 - Subject to high levels of vibration.
- Make sure you always have the unit placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces. 
- Use only the specified AC adaptor (PSA Series), and make sure the line voltage at the installation matches the input voltage specified on the AC adaptor's body. Other AC adaptors may use a different polarity, or be designed for a different voltage, so their use could result in damage, malfunction, or electric shock. 





⚠ WARNING

- This unit, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level, or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should immediately stop using the unit, and consult an audiologist. 
- Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the unit. 
- If any of the following should occur, immediately switch off the power; and, if you are using one, disconnect the AC adaptor (optional) from the power outlet. Afterwards, take the unit to your dealer or to a Roland Service Center for repair. 
 - The AC adaptor or the power-supply cord has been damaged; or
 - Objects have fallen into, or liquid has been spilled onto the unit; or
 - The unit has been exposed to rain (or otherwise has become wet); or
 - The unit does not appear to operate normally or exhibits a marked change in performance.
- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit. 
- Protect the unit from strong impact. (Do not drop it!) 
- Batteries must never be recharged, heated, taken apart, or thrown into fire or water. 

CAUTION




- When using this device with an AC adaptor (optional), make sure the unit is placed only in a well-ventilated area with regular air flow. 
- Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children. 
- Never climb on top of, nor place heavy objects on the unit. 
- Before cleaning the ME-30, first turn off the power switch and, if you are using one, disconnect the AC adaptor from the power outlet. 

CAUTION






- If used improperly, batteries may explode or leak and cause damage or injury. In the interest of safety, please read and observe the following precautions (page 28). 
 - Carefully follow the installation instructions for batteries, and make sure you observe the correct polarity.
 - Avoid using new batteries together with used ones. In addition, avoid mixing different types of batteries.
 - Remove the batteries whenever the unit is to remain unused for an extended period of time.
 - If a battery has leaked, use a soft piece of cloth or paper towel to wipe all remnants of the discharge from the battery compartment. Then install new batteries. If any of the discharge from the battery has gotten onto your hands or skin, make sure to wash the area thoroughly with water.
 - Never keep batteries together with metallic objects such as ballpoint pens, necklaces, hairpins, etc.
- Used batteries must be disposed of in compliance with whatever regulations for their safe disposal that may be observed in the region in which you live. 

When using an AC adaptor (PSA Series; optional), please also observe the following precautions.

WARNING

- Avoid damaging the power cord. Do not bend it excessively, step on it, place heavy objects on it, etc. A damaged cord can easily become a shock or fire hazard. Never use a power cord after it has been damaged. 
- Do not force the unit's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through. 
- Before using the unit in a foreign country, consult with your dealer, or qualified Roland service personnel. 

CAUTION

- Always grasp only the plug or the body of the AC adaptor when plugging into, or unplugging from, an outlet or this unit. 
- Whenever the unit is to remain unused for an extended period of time, disconnect the AC adaptor. 
- Never handle the AC adaptor body, or its plugs, with wet hands when plugging into, or unplugging from, an outlet or this unit. 
- Before moving the unit, disconnect the AC adaptor and all cords coming from external devices. 
- Whenever you suspect the possibility of lightning in your area, disconnect the AC adaptor from the outlet. 

IMPORTANT NOTES

In addition to the items listed under "USING THE UNIT SAFELY" on page 2–3, please read and observe the following:

Power Supply: Use of Batteries

- Do not use this unit on the same power circuit with any device that will generate line noise (such as an electric motor or variable lighting system).
- Since the ME-30 consumes a considerable amount of power, we recommend the use of an AC adaptor. Be sure to use only the specified AC adaptor, and connect it only to outlets delivering the specified voltage. For battery-powered operation, we recommend that you use alkaline batteries.
- When installing or replacing batteries, always turn off the power on this unit and disconnect any other devices you may have connected. This way, you can prevent malfunction and/or damage to speakers or other devices.
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.

Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Excessive heat can deform or discolor the unit.

Maintenance

- For everyday cleaning wipe the unit with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a cloth impregnated with a mild, non-abrasive detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Never use benzene, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Repairs and Data

- Please be aware that all data contained in the unit's memory may be lost when the unit is sent for repairs. Important data should always be written down on paper. During repairs, due care is taken to avoid the loss of data. However, in certain cases (such as when circuitry related to memory itself is out of order), we regret that it may not be possible to restore the data, and Roland assumes no liability concerning such loss of data.

Additional Precautions

- Please be aware that the contents of memory can be irretrievably lost as a result of a malfunction, or the improper operation of the unit. To protect yourself against the risk of losing important data, we recommend that you periodically save a backup copy of important data you have stored in the unit's memory on a paper.
- Unfortunately, it may be impossible to restore the contents of data that was stored in the unit's memory once it has been lost. Roland Corporation assumes no liability concerning such loss of data.
- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- Never strike or apply strong pressure to the display.
- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).
- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.

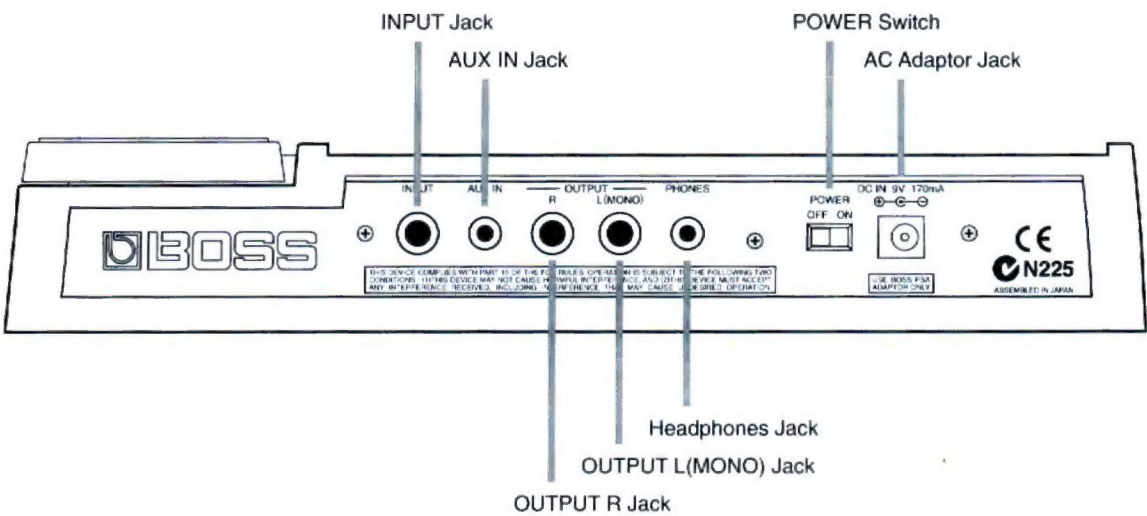
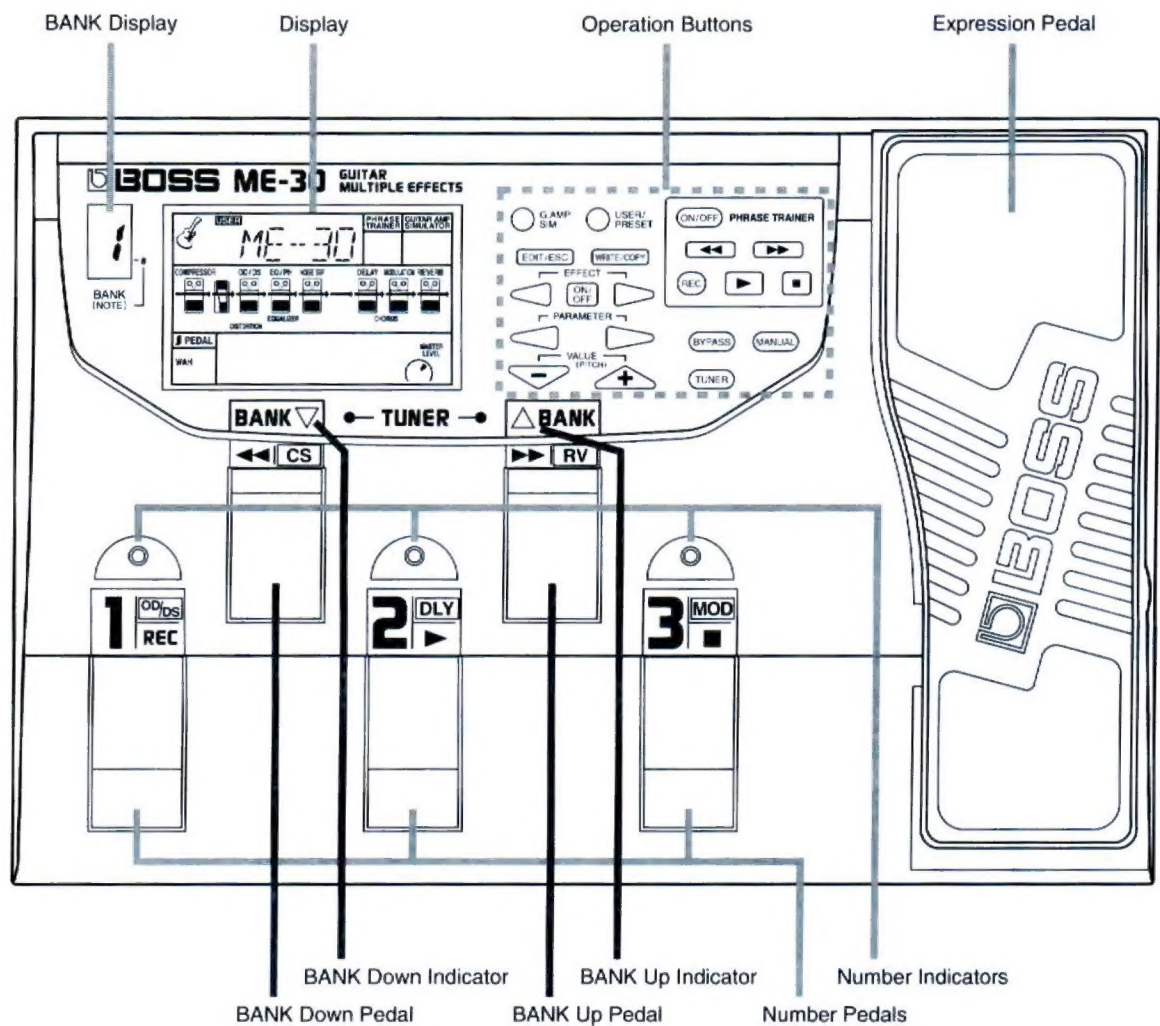
When using an AC adaptor (PSA Series; optional), please also observe the following precautions.

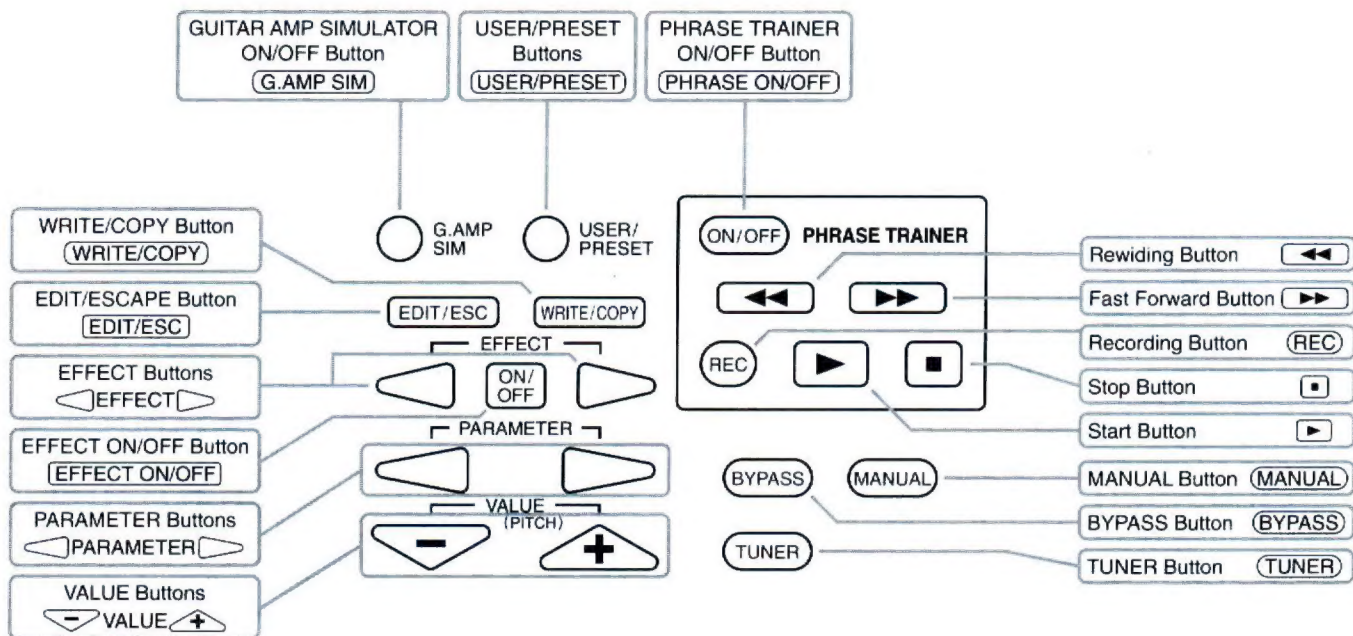
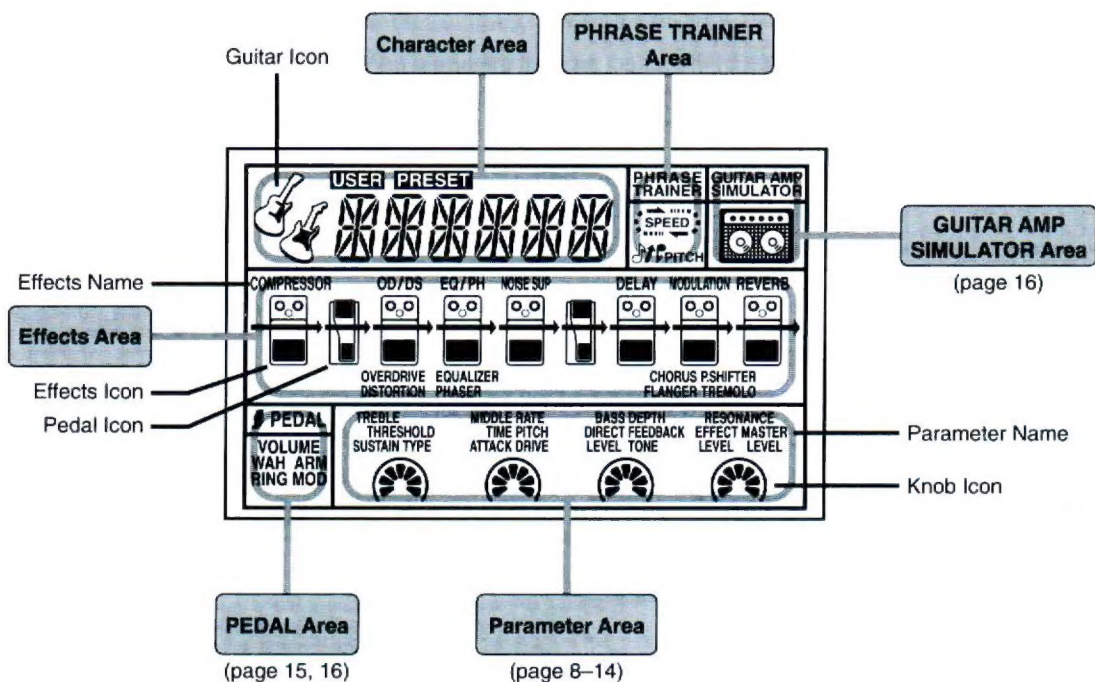
- The AC adaptor will begin to generate heat after long hours of consecutive use. This is normal, and is not a cause for concern.

Contents

Main Features	1
USING THE UNIT SAFELY	2
IMPORTANT NOTES	4
Panel Descriptions	6
Effects Descriptions	8
COMPRESSOR	8
OVERDRIVE/DISTORTION (OD/DS)	9
EQUALIZER/PHASER (EQ/PH)	10
NOISE SUPPRESSOR (NOISE SUP)	11
DELAY	11
MODULATION	12
REVERB	14
About the Expression Pedal	15
VOLUME PEDAL	15
WAH	15
TREMOLO ARM	16
RING MODULATOR (RING MOD)	16
GUITAR AMP SIMULATOR	16
About Patches	17
Making Connections	17
Checking Out Sounds — Play Mode	18
Arranging a Setup That's Convenient 1 — Copying Patches	20
Arranging a Setup That's Convenient 2 — Exchanging Patches	20
Arranging a Setup That's Convenient 3 — Edit Mode	21
Storing Your Sounds — The Write Procedure	23
When You Don't Want to Store Your Sounds — Escape	23
Using the ME-30 Like a Chain of Compact Effects — Manual Mode	24
Getting Only the Guitar Sound With No Effect — Bypass Mode	25
Tuning the Guitar — Tuner Mode	25
Practicing Along with a CD or MD — The AUX Input Jack	26
Copying Difficult Phrases — The Phrase Trainer Function	27
Copying Fast Phrases — Changing Playback Speed	28
Changing the Batteries	28
Restoring Factory Settings — Initialization	29
Factory Settings	30
Blank Chart	31
Before Assuming a Malfunction — Troubleshooting	32
Specifications	33
Index	34

Panel Descriptions





* In this manual, button operations are given with the symbols for them shown in brackets.

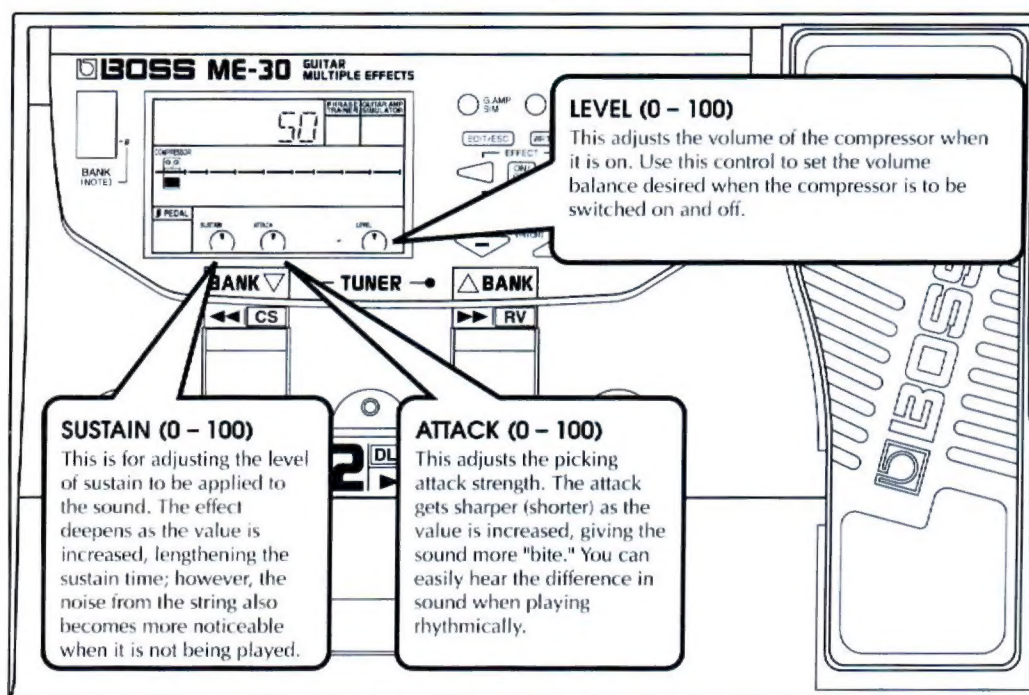
Effects Descriptions

Here is an introduction to the ME-30's built-in effects and their parameters.

Following is a description of the effects shown in the "effect area" of the liquid crystal display (refer to page 7). Additionally, there are a number of controls (equivalent to compact effect knobs) for adjusting the sound qualities, or parameters, for each effect. These effects are connected in the ME-30 in the most generally used sequence.

COMPRESSOR

Through compression of high input and expanding low input signals, you can get great, long sustain without distortion. You can also use the special compression feel for rhythm or fusion guitar solos.



OVERDRIVE/DISTORTION (OD/DS)

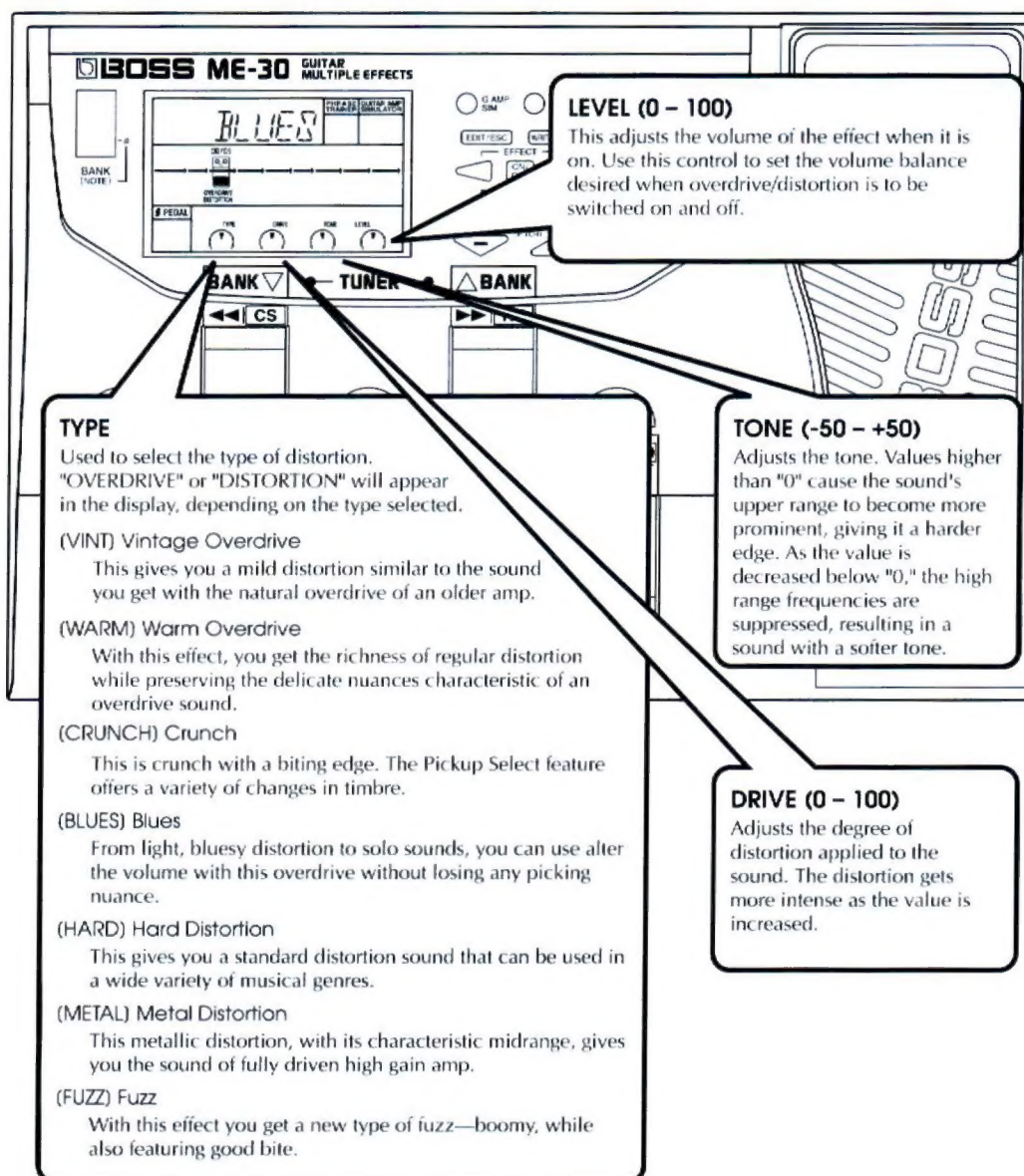
This distorts the sound. Depending on the character of the sound, you can get various types of distortion, which are classified into two main types, overdrive and distortion.

OVERDRIVE

This is a warm, natural-sounding distortion that you get when you turn up the volume on a tube amp.

DISTORTION

With this, you get not just amp distortion, but the deep, intense distortion of Heavy Metal and Grunge.

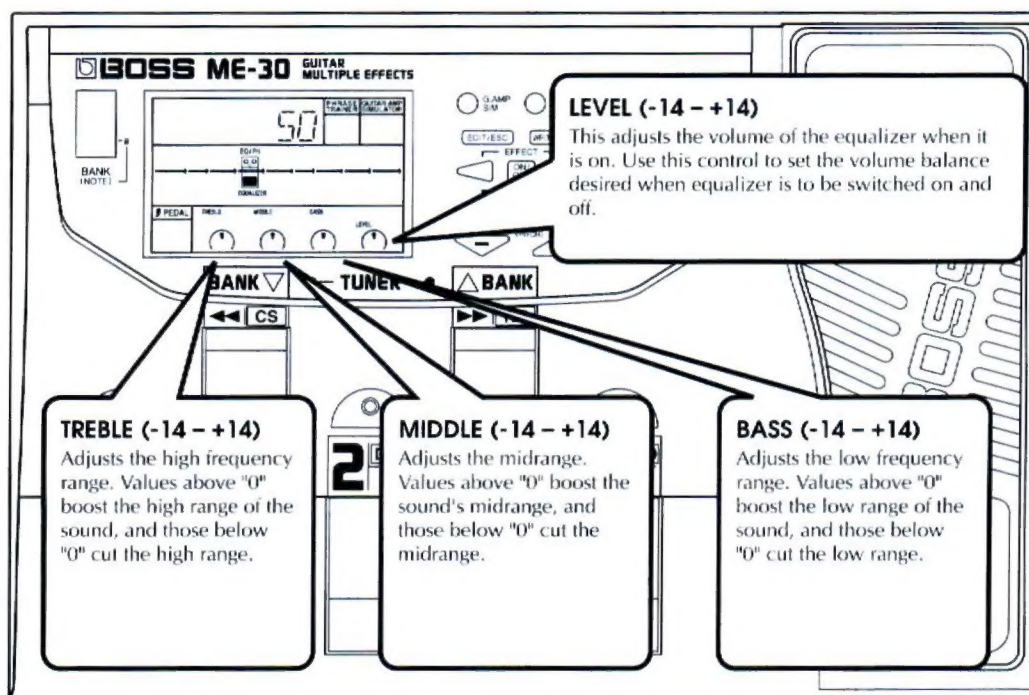


EQUALIZER/PHASER (EQ/PH)

Selects either the equalizer or the phaser. Depending on the effect selected, "EQUALIZER" or "PHASER" will appear in the display.

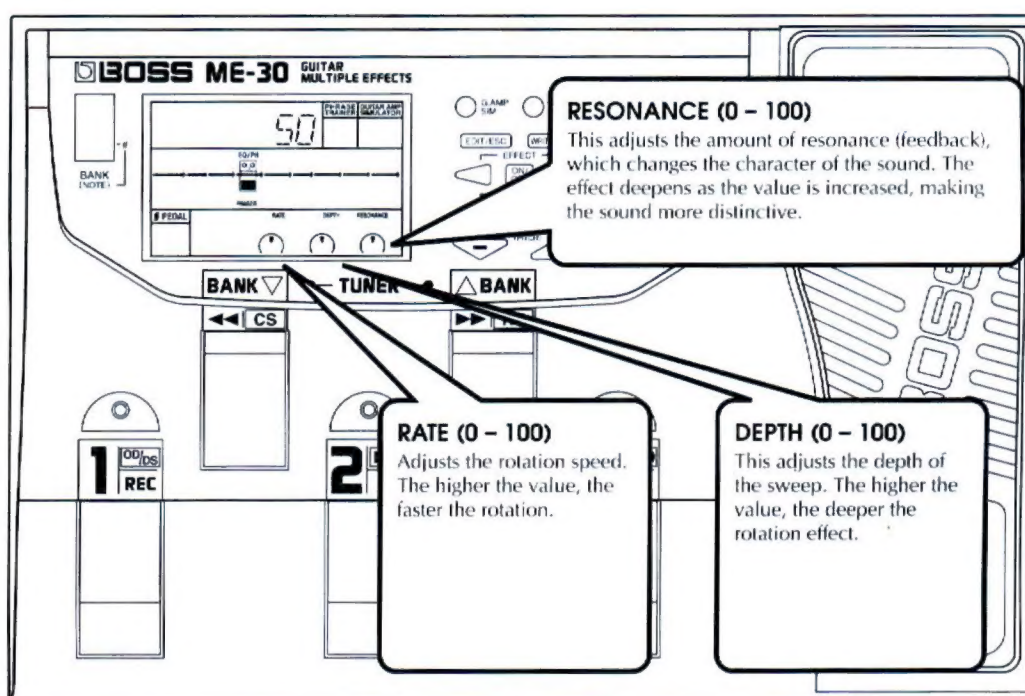
EQUALIZER

The ME-30's equalizer allows you to change the character of the sound with independently adjustable volume for high (treble), mid, and low (bass) frequency ranges.



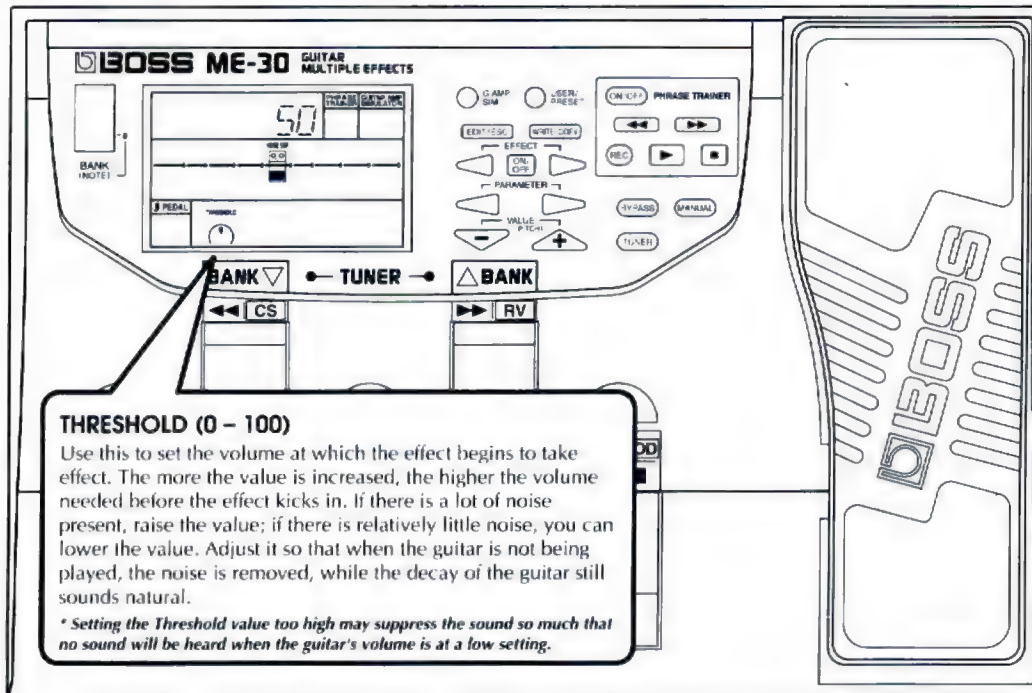
PHASER

This is an effect that makes the sound seem to swirl. Although it resembles a flanger effect, you get a softer, more natural revolving sensation with the phaser.



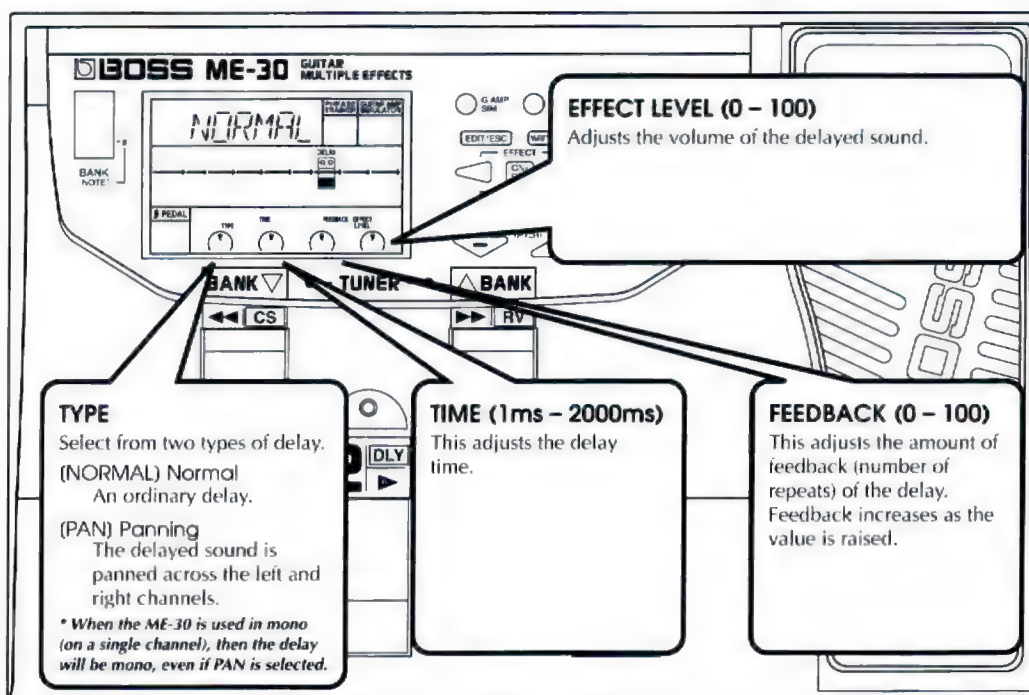
NOISE SUPPRESSOR (NOISE SUP)

The noise suppressor cuts noise and hum that may be picked up by the guitar. Use this feature when noise from the guitar becomes noticeable when it is not being played. The suppressor may be particularly helpful when you are using compression, overdrive, or distortion. Since the original volume of the guitar sound being input is carefully monitored, you constantly obtain a very natural effect.



DELAY

Delay adds an echo effect to the sound.

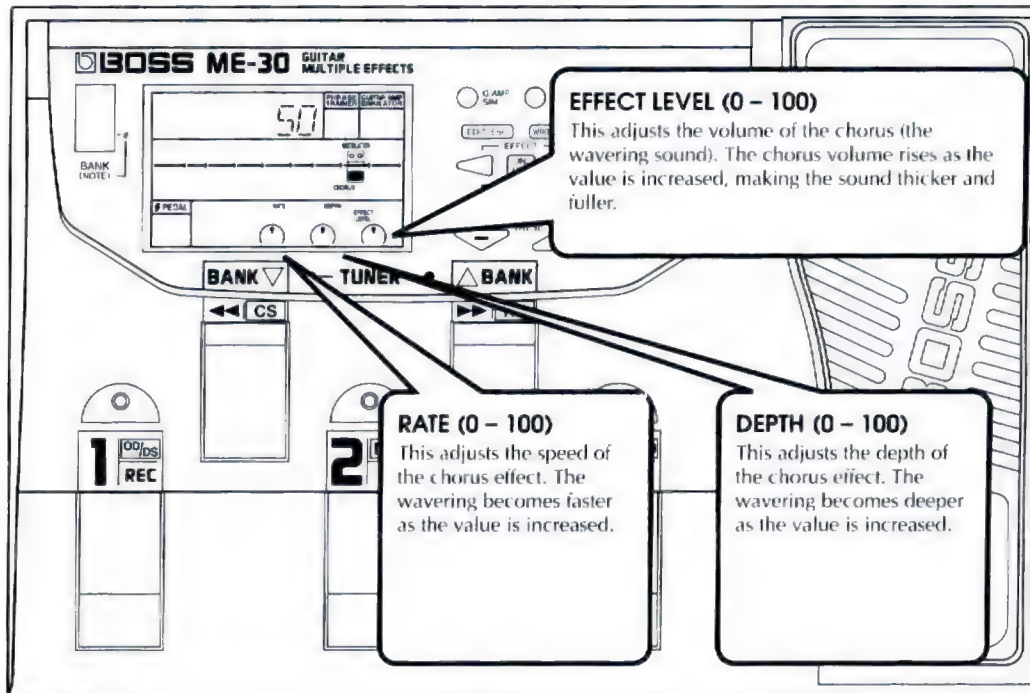


MODULATION

Four kinds of effects using modulation are available: CHORUS, FLANGER, PITCH SHIFTER, and TREMOLO. The name of the effect you have selected appears in the display.

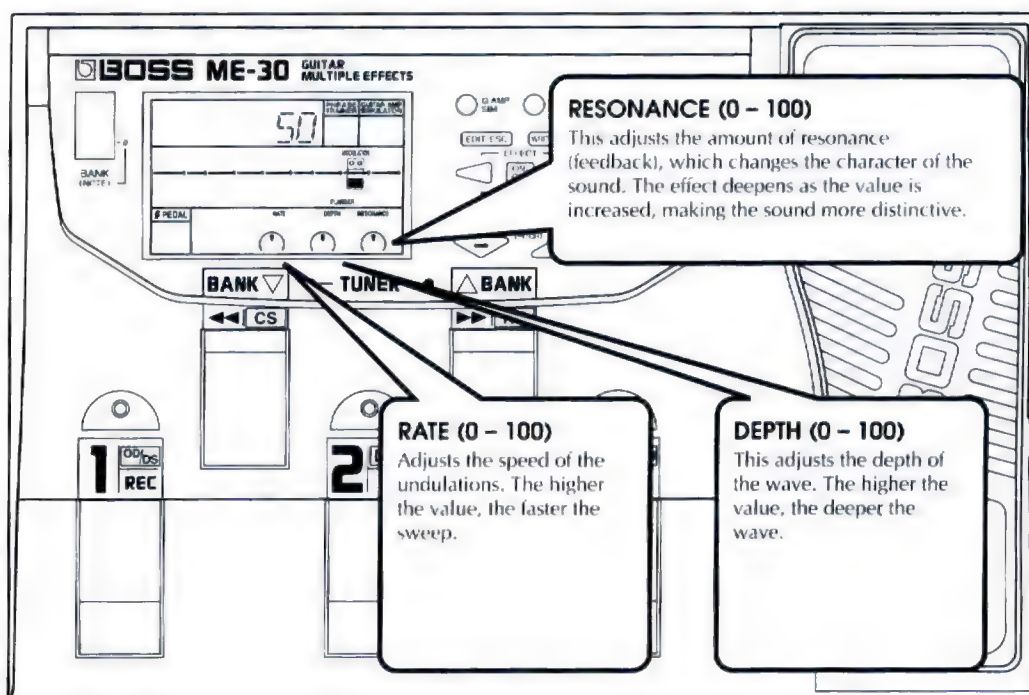
CHORUS

By adding a subtle wavering, this effect creates a broader, fuller, more beautiful sound. This effect, developed by BOSS, is now popular throughout the world.



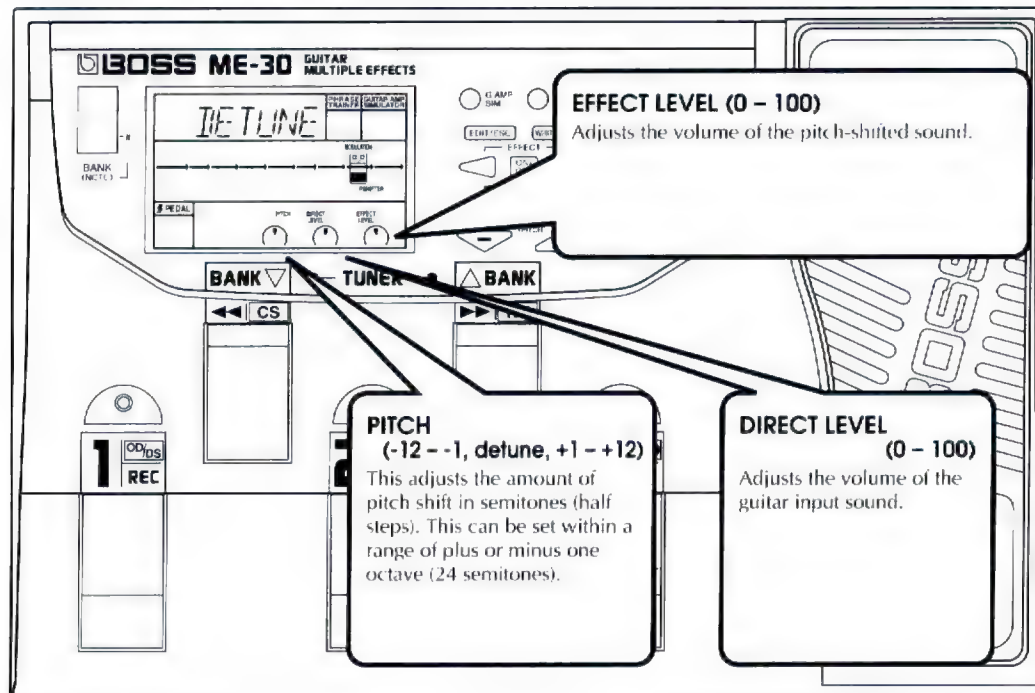
FLANGER

This adds an undulating effect to the sound. Although it resembles the phaser effect, with the flanger you get a colder, more metallic undulating sound. Perfect for Heavy Metal.



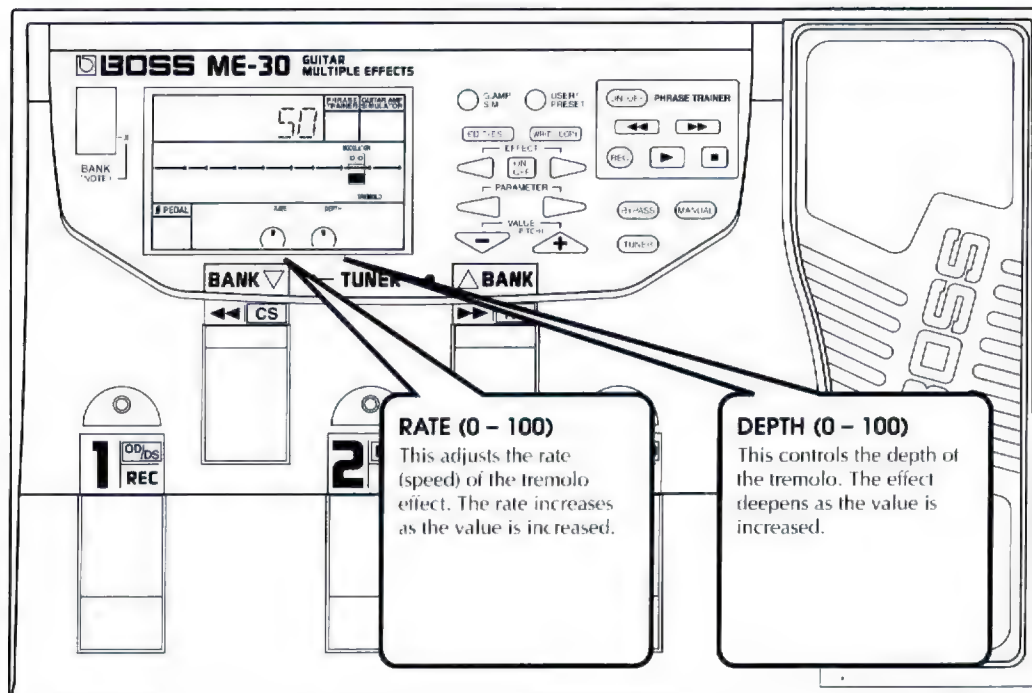
PITCH SHIFTER

This effect alters the guitar pitch. This can be used for a variety of effects. For example, by adding portions an octave higher, you can get a sound like that of a 12-string, or you can turn a single note into a chord to make a twin lead. You can create a "detuned chorus" by adding to the source sound portions that have been slightly pitch-shifted, resulting in a chorus that imparts a different sense of breadth than you get with just the regular chorus.



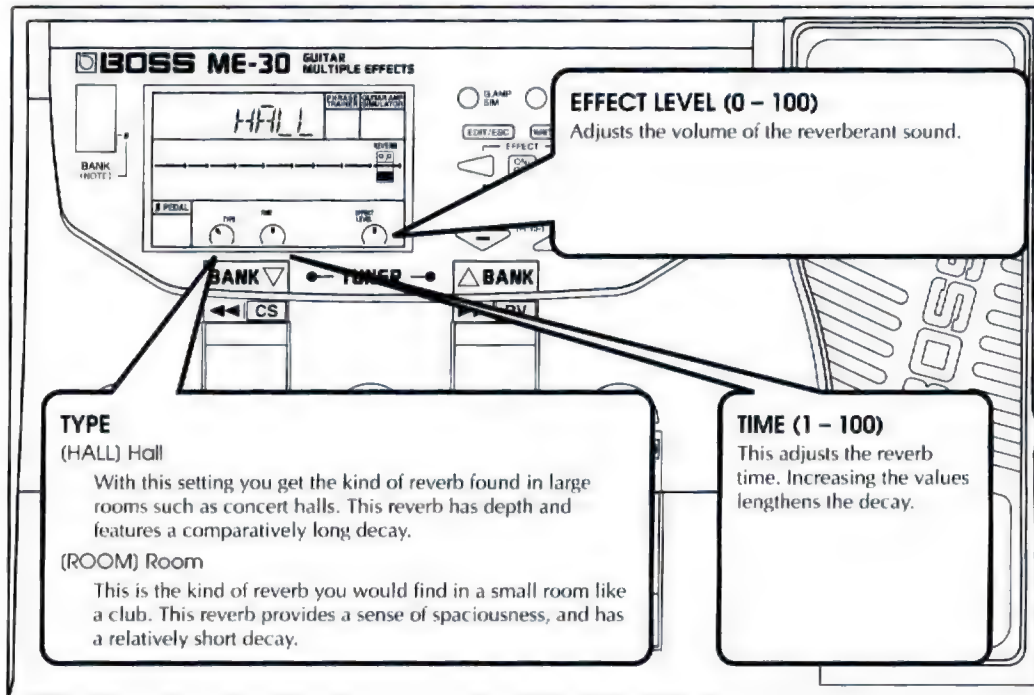
TREMOLO

Tremolo is an effect created through cyclical changes in the amplitude of the sound. You can freely set it to the depth you need, from the light tremolo of older amps to a deep effect in which the sound seems to be produced intermittently.



REVERB

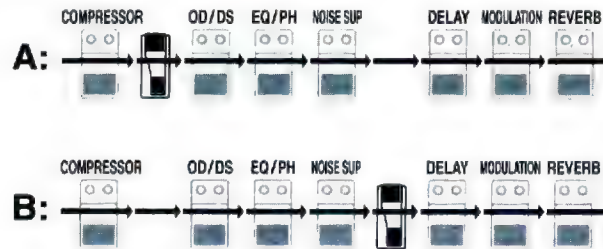
This adds reverberation to the sound.



About the Expression Pedal

You can select any of the effects described below, which have been set up to be used especially with the expression pedal. You can assign a different effect to each patch (see page 17).

Depending on the effect selected, you can further select one of two internal connection settings, (A:COMPRESSOR-OD/DS, OR B:NOISE SUP-DELAY — see accompanying figure). The nuance of the effect changes with the position selected.



You can check which effect is currently selected by viewing the display's pedal area (see p. 7).

VOLUME PEDAL

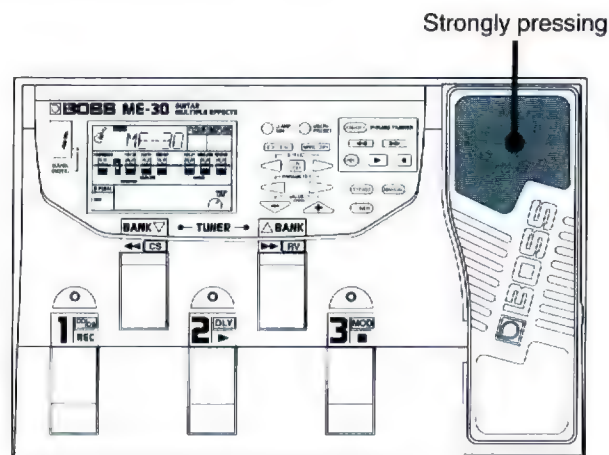
This adjusts the volume. Raising the toe of the pedal reduces the volume, and pressing it down increases the volume. Used along with distortion (OD/DS), when the pedal is in the A: position, both volume and the distorted sound are changed when the pedal is moved, but when position B: is selected, only the volume changes. When setting your overall volume, or when using the volume for effect, B: is the preferred position.

WAH

By moving the pedal a certain way, you can get an effect where the guitar makes a "wah wah" sound. Raising the toe end of the pedal produces an "oo" sound; pressing it down makes it sound like "wa."

When used along with distortion (OD/DS), you get an ordinary type of effect with the pedal in the A: position; with the pedal in the B: position, the effect becomes stronger, more emphasized.

While playing, you can switch the wah effect on and off by strongly pressing on the toe of the expression pedal.



TREMOLO ARM

This simulates the "arm up" and "arm down" effect of a tremolo arm, changing the pitch of the guitar input sound. The four types of effect are shown below. With the tip of the pedal all the way up, you get only the direct input sound, with no effect, with the pitch changing as you press down on the pedal.

ARM 1: Lowers the pitch up to one whole octave below the input sound.

ARM 2: Raises the pitch up to one whole octave above the input sound.

ARM 3: Mixes the sound of ARM 1 with the original input sound.

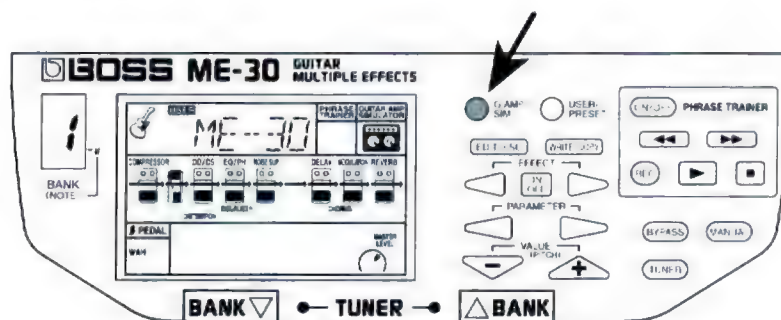
ARM 4: Mixes the sound of ARM 2 with the original input sound.

RING MODULATOR (RING MOD)

This effect modifies the sound through an interaction between the ME-30's internal oscillator and the sound input from the guitar, producing a metallic reverberation with the distinction between notes blurred. With the tip of the pedal all the way up, you get only the direct input sound, with no effect; pressing down on the pedal a bit adds a little effect; pressing down on the pedal even more changes the frequency generated by the internal oscillator, allowing you to create a distinctive, wavering sound. When used along with distortion, playing with the selector in the A: position produces a more extreme sound than with the selector in the B: position.

In addition to the above effects, the ME-30 features a built-in guitar amp simulator.

GUITAR AMP SIMULATOR



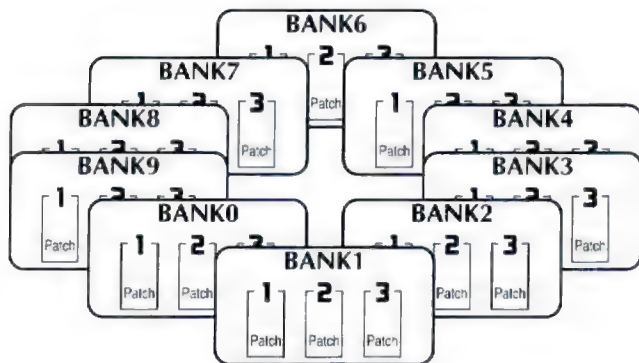
This effect simulates the defining characteristics of a guitar amp's sound. Turn this on at times such as when you are using headphones or recording direct to tape. Conversely, when you connect to a guitar amp on stage or in the studio, be sure to switch this effect off.

About Patches

When you are actually playing your guitar in a performance, you need to use the sounds that fit what you are playing. The effects and parameters you'll want to have switched on, as well as the effect you will want to use with the expression pedal will vary from sound to sound. With the ME-30, you can make settings for these parameters beforehand—including effects settings and volume levels—then instantly change sounds using the pedals. These collections of stored settings are grouped into what are called "patches." The ME-30's memory holds sixty of these patches. Thirty are in Preset memory, and their contents cannot be rewritten. The other thirty are in User memory, where you can freely rewrite their contents to create whatever sounds you like.

Both the Preset and User areas are further divided into ten banks, with three patches in each.

*** When shipped from the factory, the User Memories are set to the same settings as the Preset Memories.**



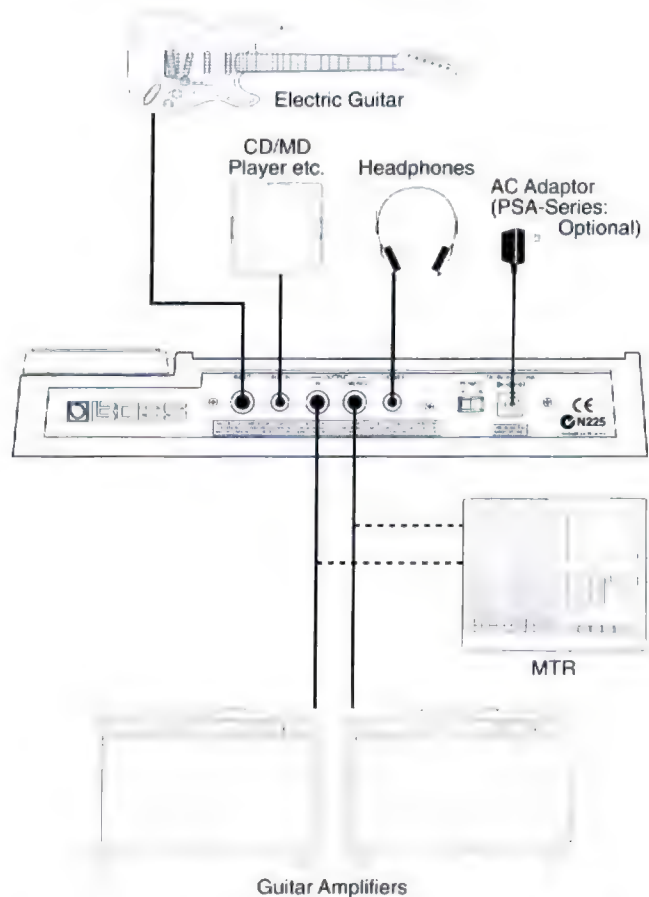
For more on switching patches, please see "Switching Patches" (page 18).

Making Connections

After connecting your guitar or guitar amp as described below, turn on the ME-30's power switch.

*** Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.**

(CD/MD Player) → ME-30 → Guitar Amplifiers



- * To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.**
- * Turn up the volume on amps only after first making all connections and turning on the amp's power switch.**
- * When using monaural output, be sure to connect your cable to the OUTPUT L(MONO) jack.**
- * This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.**
- * When operated on batteries alone, "BATT L" appears in the LCD's character area when the battery levels run very low. When this happens, replace the batteries with new ones.**
- * When using batteries, insert batteries according to the directions in "Changing the Batteries" (page 28).**
- * When using an AC adaptor with the ME-30, be sure to use only model PSA-Series AC adaptor, which is designed for use with the ME-30. Using other AC adaptors may result in fire or cause other damage.**
- * If there are batteries in the unit while an AC adaptor is being used, normal operation will continue should the line voltage be interrupted (power blackout or power cord disconnection).**
- * Do not use cables equipped with an in-line resistor to connect CD or MD players to the input jacks.**

If There is No Sound/Low Sound Output

- Is all your other equipment properly connected?
Check all connections once more.
- Is the volume turned down?
Check the volume setting of the amp or mixer you have connected. Can you hear the sound through headphones when they are plugged in? If so, it may be that there is a short in one of the cables connecting the amp or other equipment, or your external devices could be set incorrectly.
- Is the expression pedal positioned so that the sound is lowered?
When the expression pedal is functioning as a volume pedal ("VOLUME" appears in the pedal area of the display), no sound is produced when the pedal tip is raised.
- Has the unit been switched into Tuner mode? (page 25)
Output is muted in Tuner mode.
- Could the cables you have used to connect the CD or MD player be of the kind that contains a resistor?
The audio from CD/MD players can be reduced so much that it becomes inaudible if cables with an in-line resistor are used.

Checking Out Sounds — Play Mode

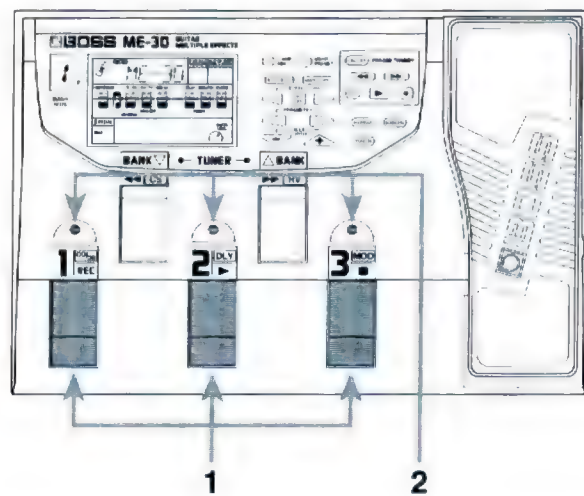
The ME-30 goes into Play mode when the power is turned on. This is the mode in which you can use the pedals to call up patches one after another when performing.

Switching Patches

To switch patches, use a number pedal (1–3) and the bank up and bank down pedals.

Switching Numbers

When you press Number pedal (1), the number indicator (2) above the pedal lights up, and the patch stored in the memory location corresponding to that number is instantly called up, switching you to that patch's sound.

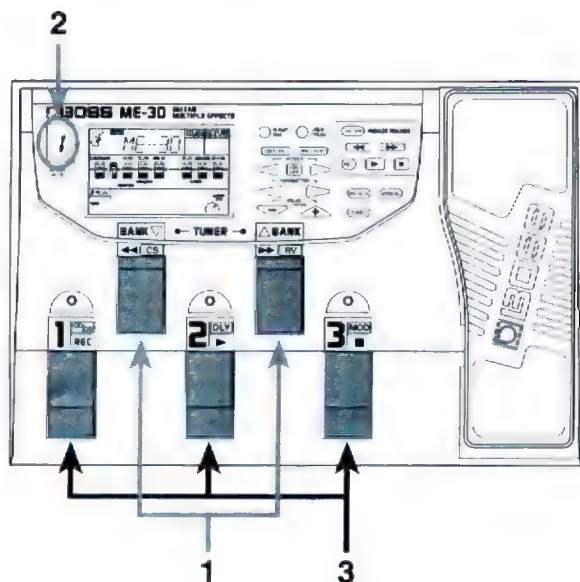


However, here you can only select from three types of sound. With the ME-30's "Bank pedals," though, you can select from an even greater number of sounds.

Switching Banks

Pressing the Bank Up and Bank Down pedals (1) changes the bank number, with the bank number that appears in the bank display (2) changing according to how many times you step on the pedals. At this point, pressing any of the Number pedals (3), switches you to the memory that is stored at that bank and number.

There are ten banks, numbered from 0 through 9, which when combined with the three numbers for each bank totals 30 patches that you can switch among.

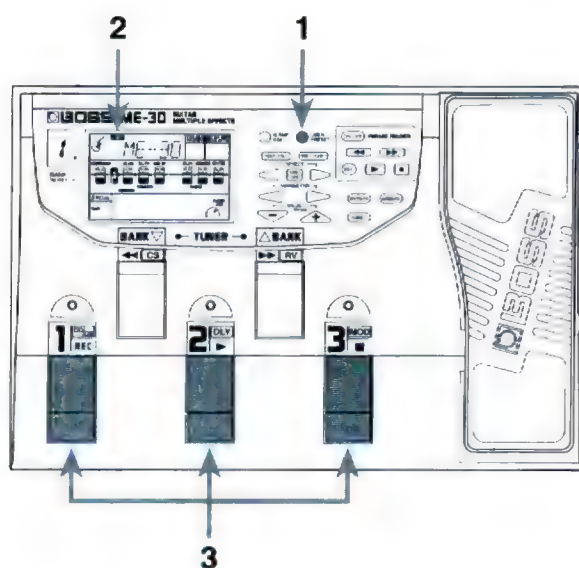


If the patch won't switch:

- Have you gone into Bypass mode (page 25)?
- Have you gone into Manual mode (page 24)?
- Have you gone into Edit mode (page 21)?
- Have you gone into Tuner mode (page 25)?
- Have you gone into the Phrase Trainer Function (page 27)?

Switching Between User Memory and Pre-set Memory

Pressing **USER/PRESET** (1) on the panel switches between USER and PRESET in the display's character area (2). When you press one of the Number pedals (3), you switch to the sound in the corresponding memory for that number.

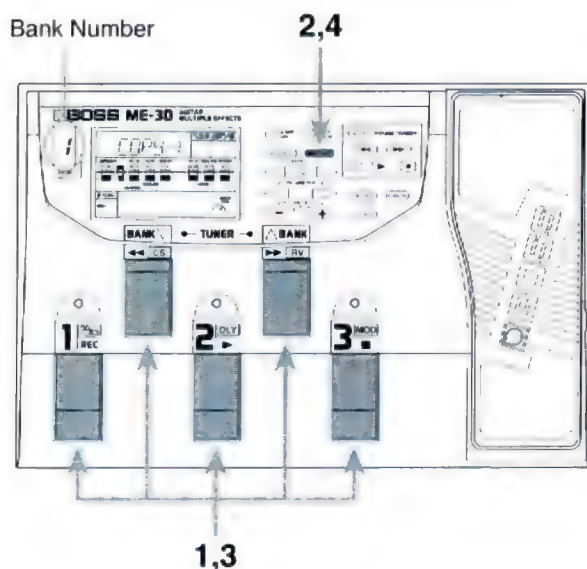


* The ME-30 automatically calls up the patch in Bank 1/Number 1 when the power is turned on.

Arranging a Setup That's Convenient 1

— Copying Patches

Let's try setting up a sequence of patches to suit a certain situation or a song we are going to play. We can choose one patch from the ME-30's PRESET or the USER memory and copy it onto another memory in the USER memory.



1. **Select a patch to be copied.**
(Refer to page 18; Switching Patches)
2. **Press WRITE/COPY one time.**
"COPY-->" appears in the character area of the display.
3. **Select the destination memory.**
You can also select a memory in a different bank. Press the Number and Bank pedals to select the number of the destination memory.

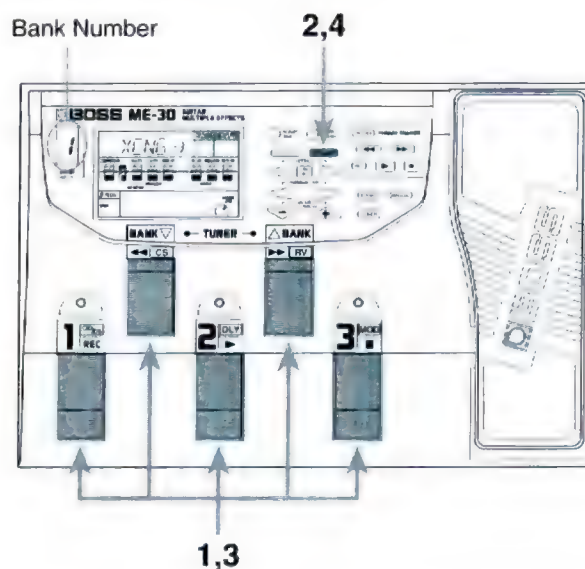
* *To cancel the copy, press EDIT/ESC. This returns you to the state you were in previously.*

* *Once the copy has been completed, you cannot restore the contents that used to be stored in the memory to which you have copied another patch.*
4. **Press WRITE/COPY one more time.**
The characters spelling "COPY" flash on and off in the character area of the display, the contents of the source memory are copied to destination memory.

Arranging a Setup That's Convenient 2

— Exchanging Patches

You will most likely want to rearrange the patches to suit your plans for a gig, and the songs you normally play. Simply perform the following to exchange any two patches residing in the ME-30's USER memory.



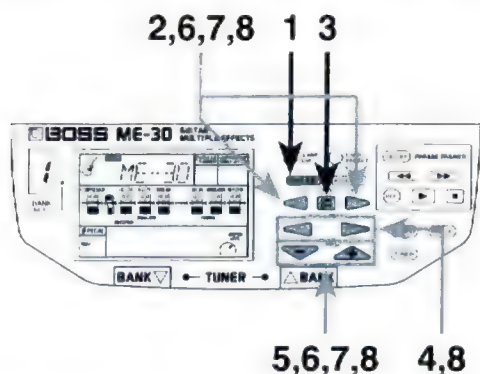
1. **Select a source patch you want to switch from.**
(Refer to page 18; Switching Patches)
2. **Press WRITE/COPY two times.**
"XCNG-->" appears in the character area of the display.
3. **Select the other memory to be switched.**
You can also select a memory in a different bank. Press the Number and Bank pedals to select the number of the destination memory.

* *When canceling the procedure, press EDIT/ESC. You are returned to the original condition.*
4. **Press WRITE/COPY one more time.**
The characters "XCNG" begin flashing in the display, and the patches at the source and destination memory locations will be exchanged, one for the other.

Arranging a Setup That's Convenient 3

— Edit Mode

Changing the contents of a patch (effect on/off status or parameter values) is called "editing." A few simple procedures are all you need to know to edit patches on the ME-30.

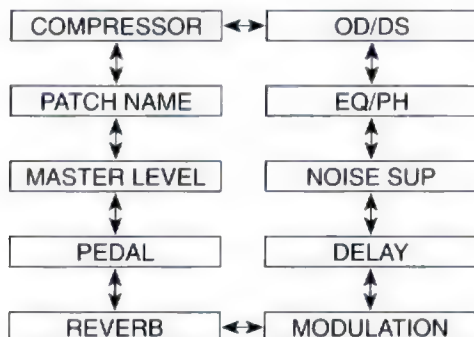


1. Go into Edit mode.

Pressing **[EDIT/ESC]** puts you in Edit mode. All of the effect names appear in the effect area (refer to page 7) of the display.

2. Select the section (effect) to be edited.

By pressing **[EFFECT]**, the flashing effect names that appear in the effect area of the display, and the display switches to the screen shown the part to be edited.



You can turn on and off each of the effects, as well as change their parameter values, in the effect sections. Each of the names of parameters needed by those effects, as well as a control knob icon showing their rough values, appear in the parameter area (refer to page 7) of the display.

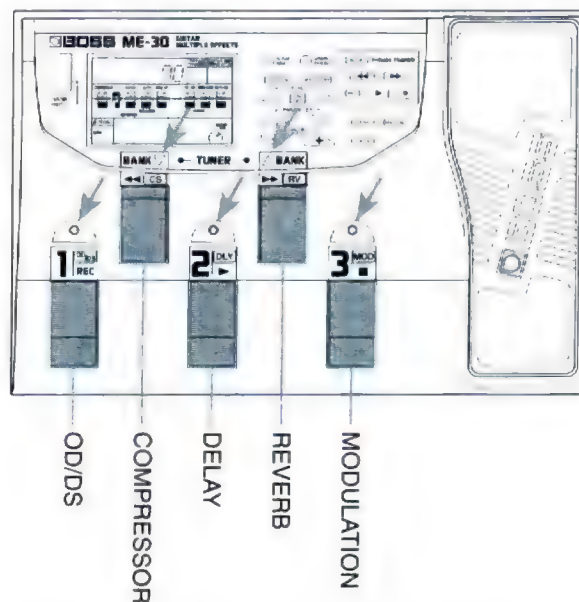
** For more on the master level, please see Step 6; for more about pedals, please see Step 7; for more about patch names, please see Step 8.*

** You can view parameters in Edit mode and their rough values by looking at the control knob icon in the parameter area of the display. The precise values are shown in the display's character area.*

3. Set the effect on/off.

Pressing **[EFFECT ON/OFF]** switches the effect to be edited on or off. The on/off status for the effect is shown with an effect icon in the display.

** In Edit mode, the on/off status of the following five effects is shown in the display as well as by the Number and Bank indicator lights. Additionally, effects can also be switched on and off using the Number pedals and Bank pedals.*



4. Select the parameter to be changed.

Using **[PARAMETER]**, select the parameter to be changed. The control knob icon of the selected parameter flashes, and the value for that parameter is shown in the display's character area.

In the EQ/PH and MODULATION sections, the effect must be selected before they are processed. When you select the EQ/PH and MODULATION sections with **[EFFECT]**, the effects you can select appear below the effect icons, with one of them flashing. Using **[VALUE]** to move through the icons, select an effect.

** If a particular effect is turned off, its value appearing in the character area flashes on and off.*

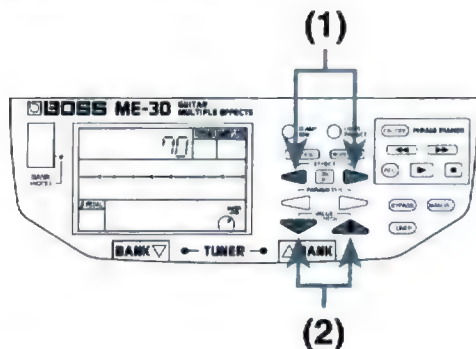
5. Change the value setting for the parameter.

Using **[VALUE]**, change the parameter's value setting. Holding down the button causes the values to change continuously.

Furthermore, when you press **[VALUE]** (or **[VALUE]**) while holding down **[VALUE]** (or **[VALUE]**) button, the values will change faster.

Repeat Steps 2 through 5 to create a sound you like.

6. Set the Master level.
MASTER LEVEL (0-100)



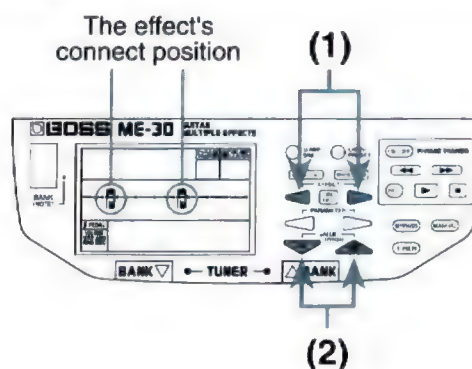
Determines the overall volume level for the patch. This is used to obtain a balanced volume relative to other patches.

- (1) Use **EFFECT** to reach the mode indicated by MASTER LEVEL in the parameter area. In that mode, you can use **VALUE +/-** to adjust the Master Level.
- (2) When setting the volume, you will probably want to raise the volume of solo parts, while reducing the volume of the backup, in the interest of achieving a good overall volume balance.

If There is No Sound/Low Sound

- Are the values of parameters connected with volume set too low?
Check to make sure that settings for parameters such as "LEVEL" are not set too low.

7. Decide which effect to control with the expression pedal.



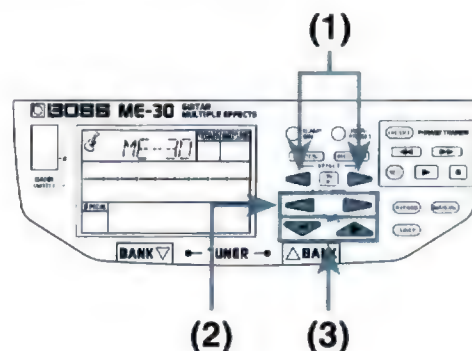
- (1) Using **EFFECT**, move through the pedal sections (immediately to the left of MASTER LEVEL).
- (2) You can then choose the pedal effect with **VALUE +/-**. In addition to being able to select the effect name shown in the character area (refer to page 7) of the display's pedal area, you can also select where the effect is connected, with the position of the pedal icon shown in the effect area.

** The position of the pedal icon (the effect's connect position) can be changed only if one of these three is assigned: Volume Pedal (VOLUME), WAH, or Ring Modulator (RING MOD).*

** When WAH is the selected effect, you can set the on/off conditions to be used when switching patches. You can switch the wah effect on and off by strongly pressing on the toe of the expression pedal. When the effect is off, the effect's icon flashes on and off.*

** When you don't need to use the expression pedal for anything in a song, we recommend that you go ahead and switch it off.*

8. Name the sound.

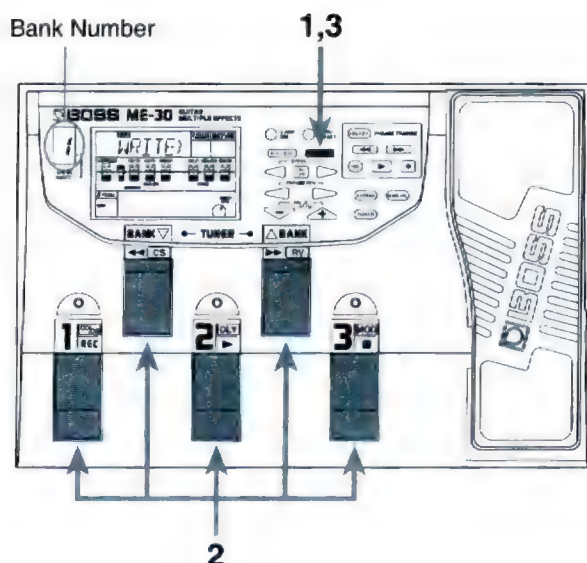


- (1) Using **EFFECT**, move through the patch name sections (immediately to the right of MASTER LEVEL).
- (2) After pressing **PARAMETER** to move the point that is flashing through the characters,
- (3) you can change the characters with **VALUE +/-**. You'll find it convenient if you name the sound you have created (using a maximum of six characters) as something that is easy to associate with that sound. You can select one of two different guitar icons. This is convenient for classifying patches by song, how they sound on the guitar, and so forth.

When you have got the sound you like, save it by carrying out the write procedure, as follows.

Storing Your Sounds — The Write Procedure

After editing a patch, use the write procedure to store your original sounds that you find you like.



** If you haven't carried out the write procedure when the power is turned or cut off, any sound you have created and edited is erased.*

1. Press **[WRITE/COPY]**.

"WRITE" flashes in the character area of the display, and the bank display and pedal number indicators show the presently selected memory number.

2. Select the memory to which you want to save the sound.

(This step is unnecessary if you don't mind saving to the current memory.)

If you like, you can select a memory in another bank. Using the Bank pedals and Number pedals, select a memory to which you want to save the sound.

** To cancel the write procedure, press either **[EDIT/ESC]**, **[EFFECT]**, **[PARAMETER]**, or **[VALUE]**.*

The write procedure is canceled, returning you to Edit mode.

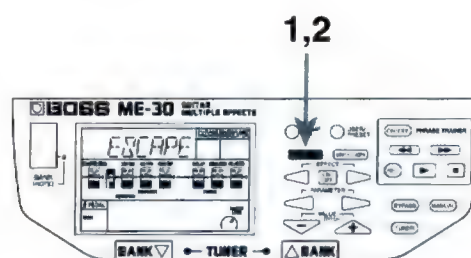
3. Press **[WRITE/COPY]** once more.

"WRITE" flashes in the character area of the display, your sound is written to the selected memory, and then you are returned to Play mode.

** Any patch previously stored at the memory location being written to is discarded the moment you complete the write procedure.*

When You Don't Want to Store Your Sounds — Escape

For those times when you think something like "Now, I've edited this sound, but don't really like it, so I just want to go back to Play mode without saving the sound," or "I want to start editing this sound again from the beginning," you can "escape," and return the sound to the way it sounded before you began editing it.



1. Press **[EDIT/ESC]**.

The characters "ESCAPE" flash in the character area of the display.

** To cancel the escape, press either **[EFFECT]**, **[PARAMETER]**, or **[VALUE]**.*

The escape procedure is canceled, returning you to Edit mode.

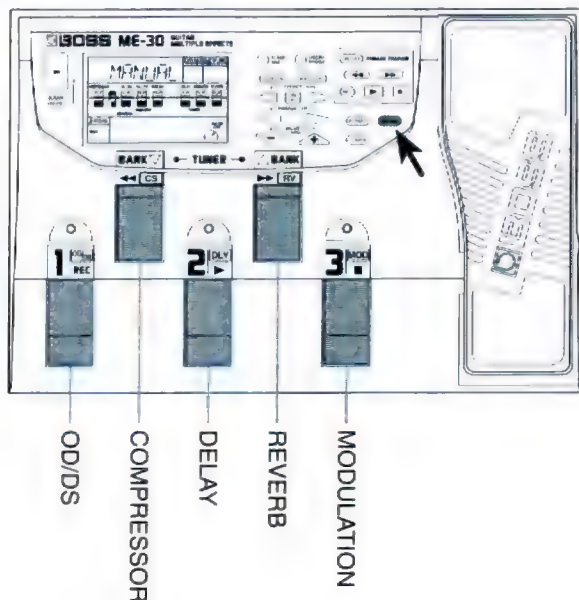
2. Press **[EDIT/ESC]** once more.

The previous version of the sound returns, and you go back into Play mode.

** All changes to the sound previously being edited are lost once you complete the escape.*

Using the ME-30 Like a Chain of Compact Effects — Manual Mode

Besides Play mode, which you usually use for switching patches while performing, the ME-30 also features a Manual mode. In Manual mode, by switching each effect on and off with the pedals you normally use to switch between your usual patches, you can get that feel of using a line-up of compact effects.



Pressing **MANUAL** puts you into Manual mode.

In Manual mode, the Number pedals (1–3) correspond respectively to OD/DS, DELAY, and MODULATION, and the Bank Up pedal and Bank Down pedal to COMPRESSOR and REVERB ON/OFF. The on/off status of each effect is shown not only in the display's effect area, but also by each pedal's indicator. In the same way as is done in Edit mode, use **EFFECT** and **EFFECT ON/OFF** for EQ/PH and NOISE SUP ON/OFF. Furthermore, you can change the parameters for each effect and the expression pedal's functions in the same way you do in Edit mode. Although changes made to the sound are stored automatically, some parameter changes may not be saved if the power is turned off or cut while you are still in Manual mode.

Press **MANUAL** again to return to Play mode.

Copying and Exchanging Sounds Between Manual Mode and User/Preset Memory Locations

To copy a sound from a User/Preset memory into Manual mode, use the procedure described in Step 3 of "Arranging a Setup That's Convenient 1 — Copying Patches" (page 20), and when you have selected a memory to write to, press **MANUAL**.

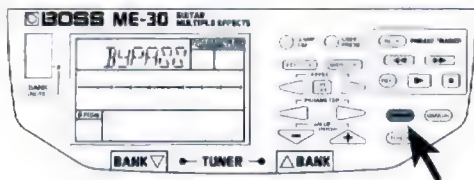
To copy a sound in Manual mode to a User memory, use Manual mode to carry out the procedure described in "Arranging a Setup That's Convenient 1 — Copying Patches."

Patches can be exchanged between the User memory and Manual mode in the same way.

- * At the factory defaults, when you copy a Manual mode patch to User memory, the patch name is shown as "-----."
- * Although the patch name does not appear when you copy a patch from User or Preset memory to Manual mode, it is remembered. When you later copy the patch from Manual mode to User memory, the patch name appears again.

Getting Only the Guitar Sound With No Effect — Bypass Mode

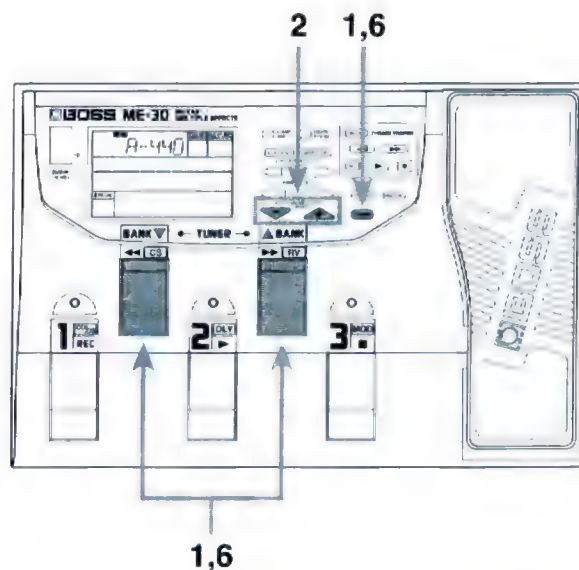
When you press **(BYPASS)**, "BYPASS" appears in the display, and the ME-30 switches to Bypass mode. Pressing **(BYPASS)** once again returns you to the previous mode.



Tuning the Guitar — Tuner Mode

The ME-30 features a built-in chromatic auto tuner. This allows you to tune your instrument easily, without having to change any connections. Additionally, when in Tuner mode, the output is muted, making it unnecessary for you to turn down your amp when you need to tune your guitar.

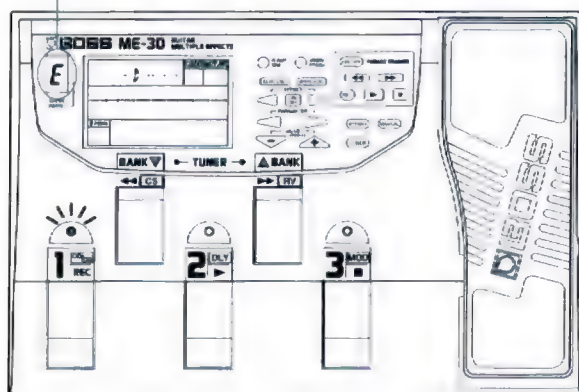
In Tuner mode, the note name appears in the bank display (refer to page 6), and the amount by which the pitch is off is shown by the number indicator and the display's character area.



- Pressing **(TUNER)** puts you into Tuner mode.**
You can also get into the Tuner mode by stepping on both the Bank Up and Bank Down pedals at the same time.
- Adjusting the standard pitch.**
With no input sound (when you are not producing any sound from your instrument), or when pressing either of **(VALUE +/-)**, the current standard pitch appears in the character area of the display. In this state, you can use **(VALUE +/-)** to change the standard pitch. You can adjust the standard pitch setting within the range of 435–445 Hz in 1 Hz steps.
** If you change the standard pitch, be sure to switch out of Tuner mode before turning the power off. The setting is saved when you leave Tuner mode. Changes to the standard pitch are not saved if the power is turned off while you are still in Tuner mode.*
- Play the open string that is to be tuned.**
The note name of the pitch closest to that sounded by the string just played appears in the bank display.
** Mute the other strings with your hand, or by other means. Allowing strings other than the one you are currently tuning to vibrate along with the string being tuned may cause the tuning to be inaccurate.*

- First, tune the strings until the appropriate note name appears in the bank display.

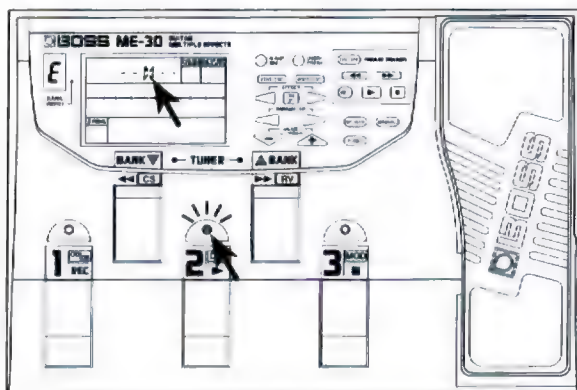
Note Name



Ordinarily, the sixth and first strings should be tuned until "E" is shown; and for the fifth string, "A," the fourth string "D," the third string "G," and the second string "B."

* When the dot at the lower right of the Bank display is lit, it means the note is sharpened (#).

- Next, try to get a more precise tuning.



When using the indicator in the display's character area, fine tune your instrument by getting only the center character to light; when using the number indicator, try to have only the number two pedal indicator light up.

Tune the other strings, repeating Steps 3 through 5.

* The recommended technique for tuning is to start a bit under the target pitch, and tune up a little at a time until you are in tune. This makes it harder for the string to go out of tune.

* On guitars fitted with tremolo arms, tuning only one string may cause the other strings to be out of tune. In this kind of situation, after first adjusting each string to its approximate tuning, then go on and fine tune all of the strings.

- Press **TUNER** once more to return to the previous mode.

Depressing the Bank Up and Bank Down pedals simultaneously will also take you back to the previous mode.

Practicing Along with a CD or MD — The AUX Input Jack

When you want to practice along with a compact disk, mini-disk, tape, or the like, connect your equipment to the auxiliary input jack (refer to page 6) on the rear panel. The sounds from connected equipment are mixed with your guitar sound in the ME-30, making it convenient to use headphones when, for example, you practice at home.

Furthermore, when you plug in headphones, or when connecting the ME-30 to your home portable stereo, we recommend that you press **G.AMP SIM** (the icon in the display lights up) to turn the guitar amp simulator (refer to page 16) on. Please refer to "Making Connections" (page 17).

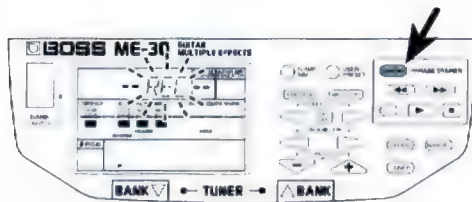
* Do not use cables equipped with an in-line resistor to connect CD or MD players to the input jacks. The audio from CD/MD players could be reduced so much that it becomes inaudible if such cables are used.

Copying Difficult Phrases — The Phrase Trainer Function

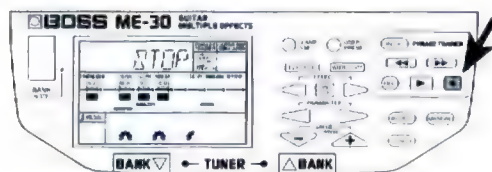
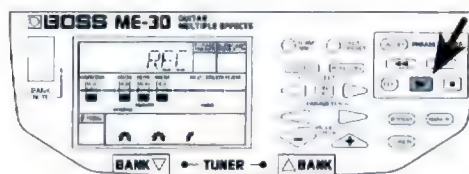
The ME-30 features a built-in "Phrase Trainer" function. With this function, you can record and repeatedly play back portions of music from devices (CDs, MDs, etc.) connected to the ME-30's auxiliary input jack, for concentrated copying or practicing of just the section you need. Additionally, you can slow down the playback of this material, making it easier to copy fast phrases or passages.

** Everything you record using the Phrase Trainer feature is discarded as soon as you turn off the Phrase Trainer, or switch off the unit.*

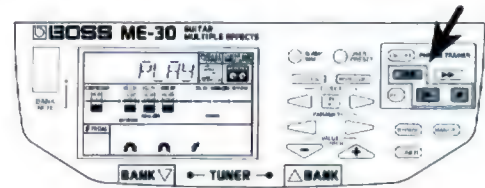
1. Press **(PHRASE ON/OFF)** to turn the Phrase Trainer function on. "REC" appears in the display's character area, and the function goes into record standby.



2. Play music from whatever device you have connected to the auxiliary input jack. Press **(▶)** the moment you reach the point where you want recording to start, and press **(■)** when you want recording to stop. The recording is in mono and extends to a maximum of 12 seconds. If the section exceeds this maximum period, then recording will stop automatically, even if you don't press **(■)**. During recording, the indicator in the display's parameter area (refer to page 7) continuously shows the recording time.



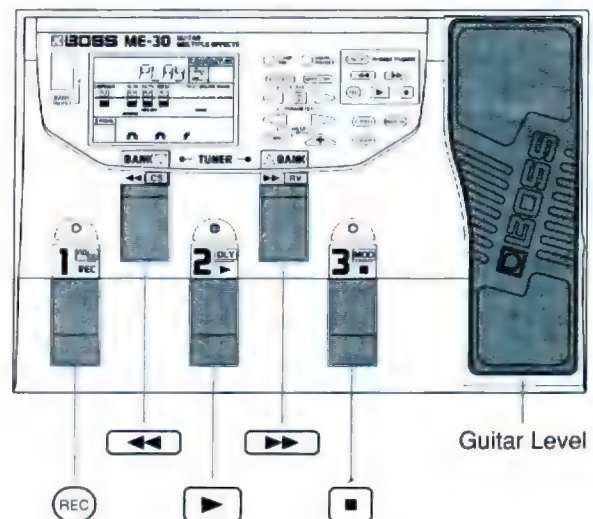
3. Press **(▶)** to repeatedly play back the recorded material. When you want to play back the segment from the beginning, after pressing **(■)** once, press **(◀◀)**, then press **(▶)** again.



4. Cue and review functions are available by pressing **(▶▶)** or **(◀◀)** during playback.
5. When you want to record again, once you have pressed **(■)** to interrupt playback, press **(REC)** again. This returns you to the condition in you were in at Step 1.




** When you use the Phrase Trainer function, you will be temporarily unable to use spatial effects (Delay, Modulation and Reverb) and the expression pedal. However, this is not because the patch itself has been rewritten, so you can go ahead and play using just the sound you hear until you turn off the Phrase Trainer function.*

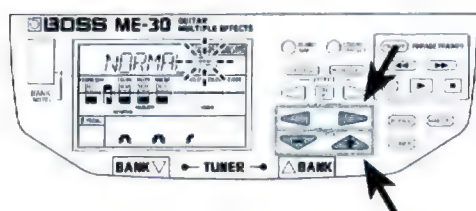
** You can use the pedals to carry out The Phrase Trainer procedures shown below. Using the pedals to perform these functions allows you to concentrate on your practice. Furthermore, you can control your guitar volume with the expression pedal, allowing you to easily adjust the volume of the source and your guitar.*






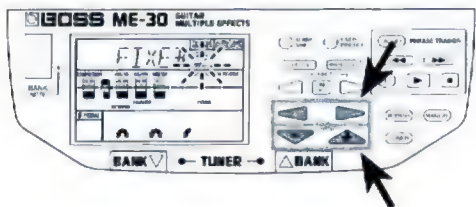
Copying Fast Phrases — Changing Playback Speed

Phrase Trainer features a function which allows you to slow down the playback speed. It also features a built-in fixed pitch mode, so the pitch remains unchanged, even when you slow down the tempo.

1. During playback or when stopped, the words "SPEED" or "PITCH" flash on and off (or just stay lit) in the Phrase Trainer area. After you press  and "SPEED" begins flashing, you can change the speed with  VALUE .



2. When you once more press , "PITCH" then flashes. In this mode, you can use  VALUE  to switch between "FIXED" and "VARY." When you select "VARY," the pitch falls as you decrease the speed, whereas with "FIXED," the pitch remains as it is, and only the speed changes.



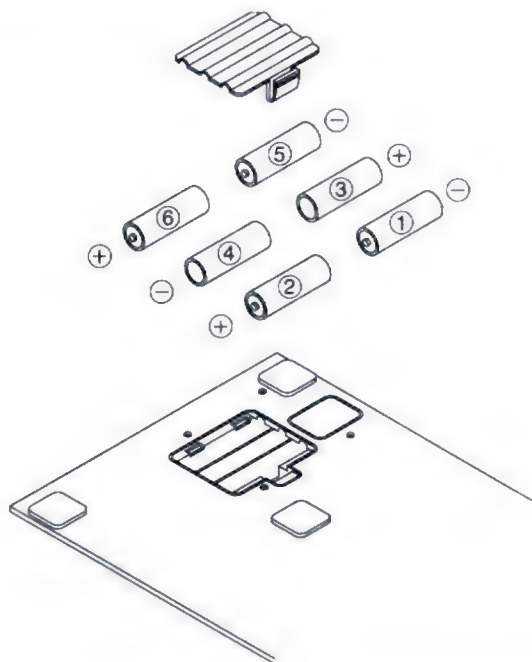
* Due to the special pitch shifter that is utilized when "FIXED" is selected, the sound may waver slightly. If you feel that this makes it difficult to hear the material well, please use "VARY."

* With "VARY," the pitch falls along with the decrease in speed. The difference between the original and shifted pitches that occurs when you slow the tempo progress is as shown below:

SPEED	INTERVAL
Normal	Original pitch
94%	Approximately one semitone lower
89%	Approximately two semitones lower
84%	Approximately three semitones lower
79%	Approximately four semitones lower
75%	Approximately five semitones lower
71%	Approximately six semitones lower
50%	One octave lower
25%	Two octaves lower

Changing the Batteries

When the batteries are depleted, "BATT L" appears in the display's character area. When this occurs, please insert fresh batteries. Due to the ME-30 high power consumption, you should use alkaline batteries.

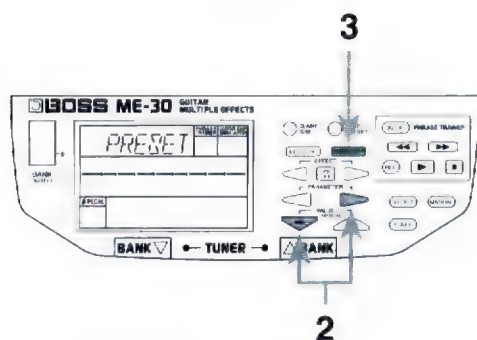


* Do not mix new and used batteries, and do not use different types of batteries.

* When inserting batteries, do not confuse the positive (plus) and negative (minus) poles.

Restoring Factory Settings — Initialization

When returning all the memories (initialization) to their factory presets, please follow the diagram below.



1. Turn off the power.
2. While holding down both **PARAMETER** and **VALUE**, turn the power back on.
"PRESET" appears in the display.
** If you want to cancel the initialization, turn the power off, then on again.*
3. Press **WRITE/COPY**.
After all the memories have been initialized, you are returned to Play mode.

Factory Settings

* When shipped from the factory, the contents of the User memory are the same as those in the Preset memory.

Factory Preset Table

BOSS ME-30 GUITAR MULTIPLE EFFECTS

	BANK 1			2			3			4			5			6			7			8			9			0		
	NUMBER	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3		
COMPRESSOR	Guiter Icon																													
	PATCH NAME	NAKED CRYING	BARK	CLASSIC FATMAN	LEAF	BLUES	SMELL	HEAVY	GRUNGE WAH-OS DS-WAH	RHYTHM 12 STR WAH-WAH	JETSND SWEDEN ARM UP	OLDIES SURFIN	UNIVIB	BECKO HOTDRY TEXAS	STREAM SHARKIN LULEAD	OCTAVE ANIMAL BREEZE														
	SUSTAIN	20								25	20	25	30																	
OVERDRIVE / DISTORTION	ATTACK	0							20	0	0	0																		
	LEVEL	100							65	70	75	70																		
	TYPE	CRUNCH	BLUES	HARD	VINT	WARM	CRUNCH	BLUES	HARD	FUZZ	METAL	FUZZ	METAL	METAL	CRUNCH	CRUNCH	CRUNCH	CRUNCH	CRUNCH	CRUNCH	CRUNCH	CRUNCH	CRUNCH	CRUNCH	CRUNCH	CRUNCH	CRUNCH	CRUNCH		
EQUALIZER	DRIVE	55	5	60	50	75	20	40	100	60	50	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75		
	TONE	0	0	0	0	10	10	30	20	5	35	0	0																	
	LEVEL	75	90	75	75	75	75	75	75	80	75	70	70																	
PHASER	TREBLE	4			6		2	0	0	6	4																			
	MIDDLE	0			2		-4	-2	-4	-14	4																			
	BASS	6			2		2	0	2	12	-2																			
NOISE SUPPRESSOR	LEVEL	2			-4		2	0	0	-4	-2																			
	RATE				35																									
	DEPTH				30																									
DELAY	RESONANCE				0																									
	THRESHOLD	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60		
	TYPE	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN		
CHORUS	TIME	310	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30		
	FEEDBACK	35	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25		
	EFFECT LEVEL	35	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
FLANGER	RATE				55	50																								
	DEPTH				65	35																								
	EFFECT LEVEL				30	15																								
PITCH SHIFTER	RATE																													
	DEPTH																													
	RESONANCE																													
TREMOLO	DIRECT LEVEL																													
	EFFECT LEVEL																													
	RATE																													
REVERB	DEPTH																													
	TYPE																													
	TIME																													
EXPRESSION PEDAL	EFFECT LEVEL																													
	OFF	WAH A	PHASE	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF		
	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70		
MASTER LEVEL																														

🎸 : These sounds were produced based on the assumption that you would be using a Single-coil pickup when playing them.
🎸 : These sounds were produced based on the assumption that you would be using a Humbucking pickup when playing them.



Blank Chart

[illegible]

Before Assuming a Malfunction

— Troubleshooting

When no sound is produced, or when you think something is acting oddly, check through the following points first. If the problem still persists even after trying the remedies listed here, please contact the retailer from whom you bought the unit, or the nearest Roland Service Center.

No sound or only low sound.

- Is all your other equipment properly connected?
Check all connections once more.
- Is the volume turned down?
Check the volume setting of the amp or mixer you have connected.
- Can you hear the sound through headphones when they are plugged in?
If sound can be heard through headphones, it may be that there is a short in one of the cables connecting the amp or other equipment, or a mistake in the settings of an external device.
- Are the parameters of any effects involving sound levels set too low?
Check to make sure that parameters such as "LEVEL" are not set too low. (page 21)
- Could the expression pedal be responsible for a reduced sound level?
When the expression pedal is functioning as a volume pedal ("VOLUME" appears in the pedal area of the display), no sound is produced when the pedal tip is raised.
- Has the unit been switched into Tuner mode? (page 25)
Output is muted in Tuner mode.

Patches won't change.

- Have you gone into Bypass mode? (page 25)
- Have you gone into Manual mode? (page 24)
- Have you gone into Edit mode? (page 21)
- Have you gone into Tuner mode? (page 25)
- Have you gone into the Phrase Trainer Function? (page 27)

Specifications

ME-30: Guitar Multiple Effects

AD Conversion

$\Delta \Sigma$ Method 20-bit ADC

DA Conversion

$\Delta \Sigma$ Method 18-bit DAC

Sampling Frequency

44.1 kHz

Patches

30 (User) + 30 (Preset) + Manual Settings

Effects

Compressor

Overdrive / Distortion

Equalizer / Phaser

Noise Suppressor

Delay

Chorus / Flanger / Pitch Shifter / Tremolo

Reverb

Guitar Amplifier Simulator

< Effects for Expression Pedal >

Volume Pedal

Pedal Wah

Tremolo Arm

Ring Modulator

Nominal Input Level

INPUT: -20 dBm

AUX IN: -10 dBm

Input Impedance

INPUT: 1 M Ω

AUX IN: 47 k Ω

Nominal Output Level

OUTPUT: -20 dBm

Output Impedance

OUTPUT: 2 k Ω

Display

7 segments, 1 character LED

Custom LCD (Luminous Display)

Jacks

INPUT Jack

AUX IN Jack (Stereo Mini Type)

OUTPUT Jacks L(MONO) / R

Headphones Jack (Stereo Mini Type)

AC ADAPTOR Jack

Power Supply

DC 9 V: Dry Batteries (R6 (AA) type) x 6

Adaptor (PSA-Series: Optional)

Current Draw

170 mA

** Expected battery life under continuous use:*

Carbon: 3 hours

Alkaline: 8 hours

These figures will vary depending on the actual conditions of use.

Dimensions

305 (W) x 205 (D) x 55 (H) mm

12-1/16 (W) x 8-1/8 (D) x 2-3/16 (H) inches

Weight

1.5 kg / 3 lbs 5 oz (including batteries)

Accessories

Owner's Manual

Dry Batteries (R6 (AA) type) x 6 (Alkaline)

Roland Service

Options

AC Adaptor PSA-Series

** 0 dBm = 0.775 Vrms*

** In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.*

Index

A

AC Adaptor Jack 6
ARM 16
AUX IN Jack 6, 26

B

Bank 19
BANK Display 6, 19
BANK Down Indicator 6
BANK Down Pedal 6, 19
BANK Up Indicator 6
BANK Up Pedal 6, 19
BATT L 28
Blank Chart 31
Bypass Mode 25

C

Changing the Batteries 28
Character Area 7
CHORUS 12
COMPRESSOR 8
Copy 20

D

DELAY 11
Display 6
DISTORTION 9

E

Edit Mode 21
Effect 8, 21
Effect Icon 7, 21
Effects Area 7
Effects Name 7
EQ/PH 10
EQUALIZER 10
Escape 23
Exchange 20
Expression Pedal 6, 15, 22

F

Factory Settings 30
FIXED 28
FLANGER 12

G

GUITAR AMP SIMULATOR 16
GUITAR AMP SIMULATOR Area ... 7
Guitar Icon 7, 22

H

Headphones Jack 6

I

Initialization 29
INPUT Jack 6

K

Knob Icon 7

M

Main Features 1
Making Connections 17
Manual Mode 24
MASTER LEVEL 22
Memory 17
MODULATION 12

N

NOISE SUPPRESSOR 11
Number 18
Number Indicator 18
Number Pedal 6, 18
Number Pedal Indicators 6

O

OD/DS 9
OUTPUT L(MONO) Jack 6
OUTPUT R Jack 6
OVERDRIVE 9

P

Parameter 21
PARAMETER Area 7
Parameter Name 7
Patch 17, 18
Patch Name 22
PEDAL Area 7
Pedal Icon 7, 22
PHASER 10
PHRASE TRAINER Area 7
Phrase Trainer Function 27
PITCH 28
PITCH SHIFTER 13
Play Mode 18
POWER Switch 6
Preset Memory 17, 19

R

REVERB 14
RING MODULATOR 16

S

Specifications 33
SPEED 28
Standard Pitch 25

T

TREMOLO 13
TREMOLO ARM 16
Troubleshooting 32
Tuner Mode 25

U






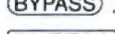









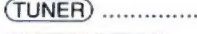

User Memory 17, 19

V

VARY 28
VOLUME PEDAL 15

W

WAH 15
Write Procedure 23

 7, 27
 7, 27
 7, 27
 7, 27
 7, 25
 7, 21
 7, 21
 7, 21
 7, 16
 7, 24
 7, 21
 7, 27
 7, 27
 7, 25
 7, 19
 7, 21
 7, 20, 23



This product complies with the requirements of European Directive 89/336/EEC.

For EU Countries

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.
This equipment requires shielded interface cables in order to meet FCC class B Limit.

For the USA

NOTICE

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

AVIS

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

For Canada

ME-30